CLAIMS

1. Method of storing and/or transporting *in vitro* two-dimensional cell cultures which comprises the following steps:

a) coating a cell culture that is immobilised on an asymmetric support with a gelatine solution in culture medium at a concentration of between 1 and 5 %, said cell culture comprising cells in suitable functional state

b) solidifying the gelatine added to the support at a temperature of between 15 and 25ºC, and

c) storing and/or transporting the cell culture at a temperature of between 15 and 25ºC for a period of up to 96 hours

2. Method according to claim 1, which comprises the additional steps:

a) liquefication of the gelatine,

b) elimination of the gelatine and substitution of same by a culture medium, and

c) incubation of the culture.

3. Method according to the preceding claims, characterised in that the two-dimensional cell culture is differentiated, polarised and is functionally active.

4. Method according to claim 3, characterised in that the cell culture is selected from: Huvec cells, grown to confluence on a collagen support and differentiated Caco-2 cells, or any other type of cells capable of growing in single layers such as fibroblasts, tumoral, hepatic, endothelial cells, etc.

5. Method according to the preceding claims, characterised in that 2.5% gelatine solution is used.

6. Method according to the preceding claims, characterised in that the gelatine is solidified at a temperature of between 15 and 25ºC, for a period of between 30 minutes and 12 hours.

7. Method according to the preceding claims, characterised in that the asymmetric support is a transwell-type support.

8. Method according to the preceding claims, characterised in that the gelatine liquefication is performed between 35 and 40ºC for a period of 1 to 4 hours.

9. Method according to claim 8, characterised in that the gelatine liquefication is performed at 37ºC.

10. Method according to the preceding claims, characterised in that the subsequent incubation of the culture is performed at between 35 and 40ºC for a period of between 1 hour and 8 days.

11. Method according to claim 10, characterised in that the culture is subsequently incubated at 37ºC.

12. Kit for storing and/or transporting *in vitro* two-dimensional cell cultures according to any of claims 1-11, comprising:
(i) an asymmetric support, and
(ii) a gelatine solution in culture medium at a concentration of between 1 and 5%.

13. Kit, according to claim 12, characterised in that the asymmetric support is a transwell-type support.

There follow 1 sheet of drawings numbered correlatively.